

IN THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application.

1-43. (Canceled)

44. (new) An apparatus for detecting objects on an airport runway, comprising:

a first transmitter positioned adjacent to an airport runway;

a first receiver positioned adjacent to said runway;

a processor operably linked to said first receiver; and

a user interface operably linked to said processor,

wherein said first transmitter is adapted to emit a first beam of light across at least a portion of said runway to said first receiver,

wherein said first receiver is adapted to indicate a first indication to said processor if said first beam of light is interrupted by an object on or over said runway,

wherein said processor is adapted to send a warning indication to said user interface in response to said first indication, and

wherein said user interface is adapted to enable a user to receive an indication in response to said warning indication.

45. (New) The apparatus of claim 44, further comprising a reflector positioned adjacent to said runway,

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wherein said reflector is adapted to reflect said first beam of light from said first transmitter to said first receiver.

46. (New) The apparatus of claim 44, wherein said first receiver and said first transmitter are adapted to form a first transceiver.

47. (New) The apparatus of claim 44, further comprising a support mechanism adapted to support said first receiver.

48. (New) The apparatus of claim 47, wherein said support mechanism is adapted to present a substantially flush surface.

49. (New) The apparatus of claim 44, further comprising a support mechanism adapted to support said first transmitter.

50. (New) The apparatus of claim 49, wherein said support mechanism is adapted to present a substantially flush surface.

51. (New) The apparatus of claim 44, further comprising a protective cover adapted to protect said first receiver.

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52. (New) The apparatus of claim 44, further comprising a protective cover adapted to protect said first transmitter.

53. (New) The apparatus of claim 44, further comprising a heating element adapted to heat said first receiver.

54. (New) The apparatus of claim 44, further comprising a heating element adapted to heat said first transmitter.

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55. (New) The apparatus of claim 44, further comprising:

a second transmitter positioned adjacent to said runway; and

a second receiver positioned adjacent to said runway,

wherein said processor is operably linked to said second receiver,

wherein said second transmitter is adapted to emit a second beam of light across said runway to said second receiver,

wherein said second receiver is adapted to send a second indication to said processor if said second beam of light is interrupted by said object on said runway, and

wherein said processor is adapted to use triangulation to locate said object on said runway.

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56. (new) An apparatus for detecting objects on an airport runway, comprising:
a first transmitter positioned adjacent to an airport runway and adapted to emit a first beam of light across at least a portion of said runway to a first receiver;
a first receiver positioned adjacent to said runway and adapted to indicate a first indication to a processor if said first beam of light is interrupted by an object on or over said runway;
a processor operably linked to said first receiver and adapted to send a warning indication to a user interface in response to said first indication; and
a user interface operably linked to said processor and adapted to enable a user to receive an indication in response to said warning indication.

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57. (New) The apparatus of claim 56, further comprising a reflector positioned adjacent to said runway,
wherein said reflector is adapted to reflect said first beam of light from said first transmitter to said first receiver.

58. (New) The apparatus of claim 56, wherein said first receiver and said first transmitter are adapted to form a first transceiver.

59. (New) The apparatus of claim 56, further comprising a support mechanism adapted to support said first receiver.

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60. (New) The apparatus of claim 59, wherein said support mechanism is adapted to present a substantially flush surface.

61. (New) The apparatus of claim 56, further comprising a support mechanism adapted to support said first transmitter.

62. (New) The apparatus of claim 61, wherein said support mechanism is adapted to present a substantially flush surface.

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63. (New) The apparatus of claim 56, further comprising a protective cover adapted to protect said first receiver.

64. (New) The apparatus of claim 56, further comprising a protective cover adapted to protect said first transmitter.

65. (New) The apparatus of claim 56, further comprising a heating element adapted to heat said first receiver.

66. (New) The apparatus of claim 56, further comprising a heating element adapted to heat said first transmitter.

67. (New) The apparatus of claim 56, further comprising:

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a second transmitter positioned adjacent to said runway and adapted to emit a second beam of light across said runway to a second receiver; and

a second receiver positioned adjacent to said runway and adapted to send a second indication to said processor if said second beam of light is interrupted by said object on said runway,

characterized in that said processor is operably linked to said second receiver and adapted to use triangulation to locate said object on said runway.

68. (new) An airport runway hazard detection system, comprising:

a runway;

a first transmitter adapted to be positioned adjacent to said runway and adapted to emit a first beam of light across at least a portion of said runway to a first receiver;

a first receiver adapted to be positioned adjacent to said runway and adapted to send a first indication to a processor if said first beam of light is interrupted by an object on said runway;

a processor operably linked to said first receiver and adapted to send a warning indication to a user interface in response to said first indication; and

a user interface operably linked to said processor and adapted to generate an indication upon receipt of said warning indication.

69. (New) The system of claim 68, further comprising a reflector positioned adjacent to said runway,

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wherein said reflector is adapted to reflect said first beam of light from said first transmitter to said first receiver.

70. (New) The system of claim 68, wherein said first receiver and said first transmitter are adapted to form a first transceiver.

71. (New) The system of claim 68, further comprising a support mechanism adapted to support said first receiver.

72. (New) The system of claim 71, wherein said support mechanism is adapted to be lowered below ground.

73. (New) The system of claim 68, further comprising a support mechanism adapted to support said first transmitter.

74. (New) The system of claim 73, wherein said support mechanism is adapted to be lowered below ground.

75. (New) The system of claim 68, further comprising a protective cover adapted to protect said first receiver.

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76. (New) The system of claim 68, further comprising a protective cover adapted to protect said first transmitter.

77. (New) The system of claim 68, further comprising a heating element adapted to heat said first receiver.

78. (New) The system of claim 68, further comprising a heating element adapted to heat said first transmitter.

79. (New) The system of claim 68, further comprising:

a second transmitter adapted to be positioned adjacent to said runway and adapted to emit a second beam of light across said runway to a second receiver; and

a second receiver adapted to be positioned adjacent to said runway and adapted to send a second indication to said processor if said second beam of light is interrupted by said object on said runway,

characterized in that said processor is operably linked to said second receiver and adapted to use triangulation to locate said object on said runway.

80. (New) A method for detecting objects on an airport runway, said method comprising:

transmitting a first beam of light across at least a portion of said runway during a first time interval;

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receiving said first beam of light transmitted during said first time interval;
generating a first indication in response to said first beam of light transmitted
during said first time interval;
transmitting a second beam of light across at least a portion of said runway
during a second time interval;
receiving said second beam of light transmitted during said second time interval;
generating a second indication in response to said second beam of light
transmitted during said second time interval;
comparing said first indication with said second indication; and
generating a warning indication based on said comparison between said first
indication and second indication.

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81. (New) A method for detecting objects on an airport runway, the method
comprising:
transmitting a beam of light across at least a portion of said runway over more
than one time interval;
receiving said beam of light; and
generating an indication in the absence of said beam of light during one or more
of said more than one time interval.

82. (New) A method for detecting objects on an airport runway, the method
comprising:

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transmitting a beam of light across at least a portion of said runway over more than one time interval;

receiving said beam of light; and

generating an indication in the presence of said beam of light during one or more of said more than one time interval.

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